

Title (en)

Novel Organometallic Compounds for Electroluminescence and Organic Electroluminescent Device Using the Same

Title (de)

Neuartige organometallische Verbindungen für Elektrolumineszenz und organische Elektroluminesenzvorrichtung damit

Title (fr)

Nouveaux composants organométalliques pour électroluminescence et dispositif électroluminescent organique l'utilisant

Publication

EP 2202224 A1 20100630 (EN)

Application

EP 09156568 A 20090330

Priority

KR 20080112855 A 20081113

Abstract (en)

Provided are an electroluminescent compound represented by Chemical Formula 1 and an electroluminescent device comprising the same as a host material: When used as a host material of an electroluminescent material in an OLED device, the disclosed electroluminescent compound exhibits superior red luminous efficiency and excellent life property of the material, as compared to the existing host material. Therefore, it can be used to manufacture OLEDs having very superior operation life.

IPC 8 full level

C07D 221/10 (2006.01); **C09K 11/06** (2006.01); **H01L 51/00** (2006.01); **H01L 51/50** (2006.01); **H05B 33/14** (2006.01)

CPC (source: EP KR)

C07D 215/26 (2013.01 - EP); **C07D 221/08** (2013.01 - EP); **C07F 5/027** (2013.01 - EP); **C07F 7/0814** (2013.01 - EP);
C09K 11/06 (2013.01 - EP KR); **H05B 33/14** (2013.01 - EP); **H10K 85/381** (2023.02 - EP); **C09K 2211/18** (2013.01 - EP);
H10K 50/11 (2023.02 - EP); **H10K 2101/10** (2023.02 - EP); **Y02E 10/549** (2013.01 - EP)

Citation (search report)

- [X] EP 1013740 A2 20000628 - KONISHIROKU PHOTO IND [JP]
- [X] JP 2000012222 A 20000114 - TORAY INDUSTRIES
- [XP] EP 2034001 A2 20090311 - GRACEL DISPLAY INC [KR] & KR 100850886 B1 20080807 - GRACEL DISPLAY INC [KR]
- [A] EP 0992564 A1 20000412 - IDEMITSU KOSAN CO [JP]
- [A] JP 2004091382 A 20040325 - MITSUBISHI CHEM CORP
- [A] US 5466392 A 19951114 - HIRONAKA YOSHIO [JP], et al
- [A] JP H0920886 A 19970121 - TOYO INK MFG CO
- [A] JP H1140355 A 19990212 - TOYO INK MFG CO

Designated contracting state (EPC)

DE FR GB

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

WO 2010056066 A1 20100520; CN 102216275 A 20111012; EP 2202224 A1 20100630; JP 2012508732 A 20120412; JP 5690276 B2 20150325;
KR 100901888 B1 20090609; TW 201035278 A 20101001; TW I428425 B 20140301

DOCDB simple family (application)

KR 2009006693 W 20091113; CN 200980145452 A 20091113; EP 09156568 A 20090330; JP 2011536250 A 20091113;
KR 20080112855 A 20081113; TW 98138368 A 20091112